



FIGURE 1

Helicase C sub-domain

VASA-Dros DFLASFSEK (9) **ITSTHG** (3) **DRLOSREQALRDFKNGSMKVL**IATSVASRGGLD**IKNI**KHVINYDMPK**DDYV**HRIGRT**CCWG**
 DRS1-yeast HRLRI**MGILL** (9) **VGE**LHG (3) **STTQ**ERLDSV**NKFN**LEVPVLI**CTDL**ASRGGLD**IPKIE**VVINYDMPK**SYEI**Y**HRV**GRTAR**A**
 SIN1 LVL**PKVFAEL** (9) **SMIGHN** (3) **EMKSSQMD**IT**SKFRDGHVT** **VAT**SVAE**EGGLD**IR**CNV**V**MRFD**LAK**IV**LAY**IQ**SRGR-**ARKP**

Helicase C sub-domain

RRP3-yeast **ERLSGLCN**LEFS**ITALHG** (5) **DLNQ**OR**MGSLD**FK**AGKR**SL**IVATD**VA**ARGLD**IPS**VDI**V**VNYD**IP**VD**SKSY**IHRV**GRTAR**AG**
 DRS1-yeast HRLRI**MGILL**MS**VGELHG** (5) **SLTQ**ERLDSV**NKFN**LEVPVLI**CTD**ASRGGLD**IPKIE**VVINYDMPK**SYEI** **HRV**GRTAR**AG**
 VASA-Dros DFLASFSEK**EP**TS**THG** (5) **DRLOSREQALRDFKNGS**VKVL**IAT**SVASRGGLD**IKNI**KHVINYDMPK**DDYV**HRIGRT**CCWG**
 SIN1 KVFA**EP**SDS**FIR**CAS**MG** (5) **EMKSSQMD**IT**SKFRDGHVT** **VAT**SVAE**EGGLD**IR**CNV**V**MRFD**LAK**IV**LAY**IQ**SRGR-**ARKP**

RNase3 sub-domain

PAC1-Scpo **ERLEFLGDS**FFNL**FTTR**II**FSK**FPQ**MD**EG**SLSK**RRK**FVGN**
 VASA-Dros **ERLEFLGDS**VLG**FI**IAS**EL**YQ**RR**PQ**AREGD**LS**RM**RAS**VMNG**
 YM68-Celg **QRLEFLGDA**VLD**YMT**RY**L**FED**S**Q**YSP**GV**LD**RSAL**VNN**
 SIN1 **ERAE**LLG**DAYL**K**WVSR**FL**FLK**Y**PQ**K**HEG**QL**TR**MP**QQ**MS**N**

dsRBD domains

Staufen-Dros **PMCL**VN**ETAR**-Y**NK**ITHO**VR**TE (3) **ERGP**AH**CKT** (3) **FTV**T**MG**-- (7) --DEEYS**ADG**FK**IKKAQ**HLA**ASKA**KE**ET**
 Staufen-Dros **PLSQ**VH**ETGI**-K**RNM**TV**HEK**VLR (3) **EEGP**AH**MKN** (3) **FTT**AC**IVG**-- (7) --SIVTE**G**EG**CKK**V**SK**RA**AEK**ML**VEL**
 Staufen-Dros **PITK**IQ**QQTE**K**KEPI**EL**IA** (3) **NG**ETAR**RR** (3) **FVME**V**SAS**-- (7) --G**STAR**CT**GN** **KLAK**R**NA**AQAL**FE**--
 SIN1 **TRQT**IND**ICLR**N**WP**MS**RCV**K (3) **EGGP**AH**AKR** (3) **FTF**GV**R** **NTSD**R**GW**TDEC**IG**EP**MP**SV**KAK**DS**AAV**LL**LELL**
 SIN1 **PVRE**Q**ERCQ**-Q**AE**GLE**YK**AS**R** (3) **SGNT**AT**VEV** (3) **F**ED**GV**Q**VG**-- (11) ----V**AQ**NP**Q**KK**MAQ**HLA**ARN**AL**AAL**

FIGURE 2